



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

117A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/533,422

04/29/2005

Karl Skjonnemand

MERCK-3008

1393

23599 7590 06/14/2007
MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
2200 CLARENDON BLVD.
SUITE 1400
ARLINGTON, VA 22201

EXAMINER

DUDEK, JAMES A

ART UNIT

PAPER NUMBER

2871

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,422	SKJONNEMAND, KARL	
	Examiner	Art Unit	
	James A. Dudek	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on ____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) 11-16 is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 1-10 and 17-19 is/are rejected.

7) ☐ Claim(s) ____ is/are objected to.

8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/29/05.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: ____.

Art Unit: 2871

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the election in the reply filed on 5/22/07 is acknowledged. The traversal is on the ground(s) that it is not an undue burden. This is not found persuasive because for the reason discussed in the election of species requirement. In short, it is an undue burden.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

The information disclosure statement filed 4/29/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 and 9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 20020150698 A1 (698).

Per claims 2 and 9, 698 teaches an electro-optical light modulation element comprising an electrode arrangement, at least one element for polarisation of the light, and a mesogenic modulation medium, said light modulation element being operated at a temperature at which the mesogenic modulation medium in the unaddressed state is in an optically isotropic phase [see paragraph 0139], characterized in that it comprises at least one optical compensation element comprising a) at least one optical retardation layer having an optical axis that is substantially

Art Unit: 2871

parallel to the plane of the layer and to the surface of the mesogenic modulation medium [see quarter wave plate 42 and paragraph 0138, the optical axis is in the plane, i.e. A-plate.]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 6, 7, 8, 10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over 20020150698 A1 (698) in view of US 5504603 A and US 5196953 A.

Per claims 1, 7 and 17-19, 698 teaches an electro-optical light modulation element comprising an electrode arrangement, at least one element for polarisation of the light, and a mesogenic modulation medium, said light modulation element being operated at a temperature at which the mesogenic modulation medium in the unaddressed state is in an optically isotropic phase, characterized in that it comprises at least one optical compensation element comprising at least one birefringent film [see rejection above]. 698 lacks the one birefringent film being made from a polymerized film. However, 603 and 953 each teach A-Plate retarders are made from polymerized material and they teach such polymer compensators are commercially or readily available. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the a-plate compensator of both 603 and 953 with 698 in order to reduce costs.*

Per claim 4, 698 teaches an electro-optical light modulation element according to claim 1, characterized in that the light during passage through the light modulation element in each case passes through at least one polariser before passing through the mesogenic modulation medium and after passing through the mesogenic modulation medium [see polarizer 40].

Per claim 6, 698 teaches an electro-optical light modulation element according to claim 1, characterized in that the mesogenic modulation medium has a nematic liquid crystal phase [698 uses cholesteric liquid crystal].

Art Unit: 2871

Per claim 10, 698 teaches an electro-optical light modulation element according to claim 2, characterized in that said compensation element comprises at least one layer a) comprising at least one positive A plate retardation film but lacks the negative A-plate compensator. However, using a negative A-plate compensator is an obvious variation for improving viewing angle/contrast. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to use a negative A-plate compensator with 698.*

Claims 3 and 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over 6299109 (109) in view of US 5504603 A and US 5196953 A.

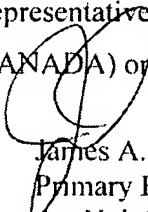
Per claim 3, 109 teaches a electro-optical light modulation element according to claim 1, characterized in that the electrode arrangement is located on one side of the layer of the mesogenic modulation medium and during operation of the light modulation element generates an electric field having a significant component parallel to the plane of the mesogenic modulation medium. 109 lacks the polymer birefringent film. However, both 603 and 953 teach using A-plate polymer compensators for improving contrast. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the a-plate retarders of 603 and 953 with 109.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James A. Dudek
Primary Examiner
Art Unit 2871